

REMARKS

The Office Action dated August 22, 2005 has been received and carefully noted. The following remarks, are submitted as a full and complete response thereto.

Rejections under 35 U.S.C. 103(a)

Claims 1-14 and 21-41 were rejected under 35 U.S.C. 103(a) as unpatentable over U.S. Patent No. 5,541,927 of Kristol et al. ("Kristol") in view of U.S. Patent No. 6,490,584 of Barrett et al. ("Barrett"). With regard to independent claim 1, upon which claims 2-14 and 41 depend, the Office Action states that Kristol teaches all the elements of the claim except "that the server configured to push status information to a client without a request for the status information from the client, wherein the status information includes network information." With regard to claims 21, upon which claims 22-30 depend, and 31, upon which claims 32-40 depend, the Office Action takes the position that Barrett teaches all the elements of the claims.

Claim 1, upon which claims 2-14 and 41 depend, is directed to a network hub in a communications network comprising a server. The server is configured to push status information to a client without a request for the status information from the client, wherein the status information includes network information.

Claim 21, upon which claims 22-30 depend, is directed to a communication apparatus including a network information table storing network information from the network information receiver. The communication apparatus also includes a network

information transmitter selectively push transmitting the network information in the network information table without a request for the network information.

Claim 31, upon which claims 32-40 depend, is directed to a communication apparatus including a network information receiver, operably coupled with a communication network, for receiving network information. The communication apparatus also includes a network information table for storing network information from the network information receiver. The communication apparatus further includes a network operations detector detecting the networking information and producing operational information of an operational state of the network. The communication apparatus additionally includes a network information transmitter, for transmitting the operational information of an operational state of the network without a request for the operational information.

As explained in the specification, beginning at page 4, line 25, certain embodiments of the present invention permit affordable network management in small office/home office (SOHO) environments. It is respectfully submitted that Kristol and Barrett, when viewed singly or combined, fail to disclose or suggest the elements of any of the presently pending claims. Therefore, the cited art fails to provide the critical and unobvious advantages discussed above.

Kristol is directed to a method of multicasting. Kristol generally discusses a method in which Source S sends a multi-cast packet to all destinations. Each destination that is first in the column sends its status to S, and each other destination in the column

sends its destination to the first destination in the column. The first destination in the column ($E_{i,1}$) locally remulticasts if $E_{i,1}$ receives the multicast packet but a destination below it ($E_{i,j}$, $j \neq 1$) has not, and S remulticasts if a first destination in a column has not received the packet.

Barrett relates to user-centered push methods and systems. Barrett uses language like “pushing network information.” The way that Barrett defines “pushing network information” is, operationally, obtaining information from cyberspace, as illustrated in col. 1, ll. 20-27. In particular, Barrett’s “pushing network information” is defined operationally by commercial software applications like The Pointcast Network TM, Castanet Tuner TM, Netcaster TM, and Microsoft’s CDF channels. Accordingly, “pushing network information” as used by Barrett relates to pushing information on a network, as opposed to pushing information about a network.

Claim 1 recites the limitation “the server is configured to push status information to a client without a request for the status information from the client, wherein the status information includes network information.” Kristol does not teach or suggest the limitation “the server is configured to push status information to a client without a request for the status information from the client, wherein the status information includes network information,” as the Office Action correctly notes.

Barrett does not remedy the deficiencies of Kristol. Barrett also does not teach or suggest the limitation “the server is configured to push status information to a client without a request for the status information from the client, wherein the status

information includes network information.” In particular, although claim 1 relates to pushing network information, such as status of a network node, statistics relating to the operational state of a network, and the state of a local and remote devices and networks, Barrett does deals with pushing information contained in a network. Additionally, it does not teach pushing information relating to the status of a network, it only discusses pushing information that may be of interest to a user based on a dynamic model that permits changing interest on the part of the user. In addition, Barrett does not indicate that Barrett’s server is a network hub in a communication network.

One of ordinary skill in the art would note have combined Kristol and Barrett. Kristol and Barrett take diametrically opposing approaches to communicating information. Kristol multicasts a packet and awaits status responses. Barrett observes requests for information, and obtains other unsolicited information, as illustrated in Col. 5, ll. 24-31 of Barrett. In contrast, Kristol is uninterested in unsolicited information. Barrett models the user as having a dynamic interest in information. Kristol’s source S has a static interest in status information. Barrett increases traffic by pushing unsolicited information to the client. Kristol’s method is designed to eliminate unnecessary communication and traffic, as illustrated at Col. 2, ll. 12-19.

Accordingly, one of ordinary skill in the art would not have found teaching, motivation, or suggestion to combine Kristol and Barrett. And, even if one somehow combined Kristol and Barrett, the combination would not include the limitation, “the server is configured to push status information to a client without a request for the status

information from the client, wherein the status information includes network information,” as explained above. Accordingly, it is respectfully submitted that Kristol and Barrett, when taken singly or in combination do not teach all the elements of claim 1.

Claim 21 recites “a network information transmitter selectively push transmitting the network information in the network information table without a request for the network information.” The cited references do not teach or suggest at least this element of claim 21.

Kristol and Barrett do not teach or suggest “a network information transmitter selectively push transmitting the network information in the network information table without a request for the network information.” Kristol does not teach this element, as the Office Action implicitly acknowledges. Barrett does not remedy the deficiencies of Kristol. In particular, as with claim 1, in the context of claim 21, the term “network information” relates to information about a network, not information found in a network. Accordingly, Barrett does not teach or suggest “a network information transmitter selectively push transmitting the network information in the network information table without a request for the network information.” This is because Barrett does not teach or suggest the claimed “network information” or a component designed to selectively push transmit the claimed “network information.” Please recall the arguments above regarding the impropriety of combining Kristol and Barrett, as those arguments apply with equal

force to this claim. Accordingly, Kristol and Barrett, when viewed singly or in combination do not teach or suggest all the elements of claim 21.

Claim 31 recites, “a network information transmitter, for transmitting the operational information of an operational state of the network without a request for the operational information.” The Office Action implicitly acknowledges that Kristol does not teach or suggest this element. Barrett does not remedy the deficiencies of Kristol. In particular, Barrett does not teach or suggest the claimed “operational information of an operational state of the network” nor transmitting that information without a request for the operational information. Additionally, the arguments described above regarding the impropriety of the combination of Kristol and Barrett should be applied here. Accordingly, Kristol and Barrett, whether viewed singly or in combination do not teach all of the elements of claim 31.

Claims 15-20 were rejected under 35 U.S.C. 103(a) as obvious over Kristol and Barrett in view of U.S. Patent No. 5,651,006 of Fujino et al. (“Fujino”). The Office Action takes the position that Kristol and Barrett teach all of the elements of the claims except that the information is a management information base (MIB) statistic and several other elements relating to an MIB engine.

Fujino is directed to a hierarchical network management system. Fujino generally describes that information can be held in an MIB format. Fujino relates the use of MIB format data to large-scale communications networks.

As described above and in the specification, certain embodiments of the present invention can make management of a network in a SOHO environment. It is respectfully submitted that Kristol, Barrett, and Fujino do not teach all the elements of any of the present pending claims, and accordingly do not provide the critical and unobvious advantages discussed above.

Claims 15-20 depend from independent claim 1. The arguments as applied to claim 1 above, apply with equal force here, and thus are incorporated by reference. Additionally, Fujino does not remedy the above-described deficiencies of Kristol and Barrett. In particular, Fujino does not teach or suggest the limitation “the server is configured to push status information to a client without a request for the status information from the client, wherein the status information includes network information.” Indeed, Fujino uses the simple network management protocol (SNMP) described in Fujino for communication among managers and sub-managers.

Thus, Barrett, Kristol, and Fujino whether taken singly or in any combination, do not teach all the elements of any of the presently pending claims. Moreover, one of ordinary skill in the art would not find teaching, motivation, or suggestion to combine Barrett, Kristol, and Fujino.

Conclusion

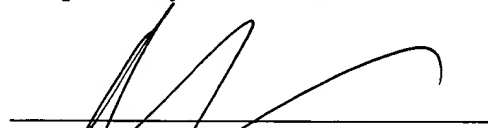
For the reasons explained above, it is respectfully submitted that each of claims 1-41 recites subject matter that is neither disclosed nor suggested in the prior art of record.

Accordingly, it is respectfully requested that all of claims 1-41 be allowed, and this application be passed to issue.

If for any reason the Examiner determines that the application is not now in condition for allowance, it is respectfully requested that the Examiner contact, by telephone, the applicants' undersigned attorney at the indicated telephone number to arrange for an interview to expedite the disposition of this application.

In the event this paper is not being timely filed, the applicants respectfully petition for an appropriate extension of time. Any fees for such an extension together with any additional fees may be charged to Counsel's Deposit Account 50-2222.

Respectfully submitted,



Douglas H. Goldhush
Registration No. 33,125

Customer No. 32294
SQUIRE, SANDERS & DEMPSEY LLP
14TH Floor
8000 Towers Crescent Drive
Tysons Corner, Virginia 22182-2700
Telephone: 703-720-7800
Fax: 703-720-7802

DHG:kmp